

Statement of Basis of the Federal Operating Permit

Eastman Chemical Company

Site Name: Eastman Chemical Company Texas Operations

Area Name: U3 - HCC-3 Olefin

Physical Location: I-20 To Eastman Exit, South On Hwy 149, Left On Garland Rd And Left On Estes Blvd To Eastman Plant Entrance.

Nearest City: Longview

County: Harrison

Permit Number: 01979

Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869

SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

- A description of the facility/area process description;
- A description of the revision project;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: April 28, 2017

Operating Permit Basis of Determination

Description of Revisions

Unit ID OL041D551, a steam stripper, was added to permit FOP O1979. The preconstruction authorization for the unit is NSR Permit 20489, effective 07/22/2016. Unit OL041D551 is subject to 40 CFR Part 61, Subpart FF and 40 CFR Part 63, Subpart YY.

NSR Permit 140734, with an issuance date of 06/10/2016, was added to the permit preconstruction authorization list and as a preconstruction authorization for Unit IDs OL170FL1 and OL170FL2.

The issuance dates for NSR permits 20489 and 908 have been updated in the New Source Review Authorization Reverences table to reflect the permit renewal dates. NSR permits 20489 and 908 were renewed without changes.

Permit Area Process Description

This application area, U3 - HCC-3 Olefin, consists of three hydrocarbon cracking plants (Hydrocarbon Cracking Plant No. 3, No. 3A and No. 3B), the Olefins Process Water Unit, and the Feedstock and Product Distribution System.

The processes at the three hydrocarbon cracking plants are of similar design. Ethylene, propylene, hydrogen and co-products are manufactured from ethane, propane, and butane in a continuous process. Process steps include pyrolysis cracking, waste heat recovery, quench, separation, storage, and loading. Emissions are from process heaters, boilers, process tanks, distillation units, reactors, storage tanks, and loading racks. Emission control devices are flares. There are fugitive equipment leaks, heat exchanger leaks and wastewater emissions. The types of emissions are volatile organic compounds (VOC), hazardous air pollutants (HAP), particulate matter (PM), carbon monoxide (CO), nitrogen oxides (NOx) and sulfur oxides (SOx).

The Olefins Process Water Unit generates steam from process water from the three cracking plants. The steps include oil and solids separation, steam stripping and steam generation. Emission units are process tanks and distillation units. Control devices are flares. The process includes fugitive equipment leaks, heat exchanger leaks and wastewater emissions. The types of emissions are NOx, CO, PM SOx, VOC and HAP.

The Feedstock and Product Distribution System includes feedstock transfer and storage, feedstock treatment and separation, and product transfer, storage, and loading. Emissions are from process tanks, distillation units, storage tanks, and loading racks. Emission control devices are flares. The process includes fugitive equipment leaks, heat exchanger leaks, and wastewater emissions. The types of emissions are VOC, HAP, NOx, CO, PM, and SOx.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1436, O1968, O1970, O1971, O1972, O1973, O1974, O1975, O1976, O1977, O1978, O1981, O1982

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

| | |
|------------------|---|
| Major Pollutants | VOC, SO ₂ , PM, NO _x , HAPS, CO |
|------------------|---|

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

| Regulatory Program | Applicability (Yes/No) |
|---|-----------------------------------|
| Prevention of Significant Deterioration (PSD) | No |
| Nonattainment New Source Review (NNSR) | No |
| Minor NSR | Yes |
| 40 CFR Part 60 - New Source Performance Standards | Yes |

| | |
|---|-----|
| 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs) | Yes |
| 40 CFR Part 63 - NESHAPs for Source Categories | Yes |
| Title IV (Acid Rain) of the Clean Air Act (CAA) | No |
| Title V (Federal Operating Permits) of the CAA | Yes |
| Title VI (Stratospheric Ozone Protection) of the CAA | Yes |
| CSAPR (Cross-State Air Pollution Rule) | No |

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.

14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring,

recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|-------------------------------|---------------|--|---------------------------------|
| OL041T545 | 40 CFR Part 61, Subpart FF | 61FF-0001 | <p>Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.</p> <p>Tank Control Requirements = The waste managed in the tank meets the conditions in 40 CFR § 61.343(b)(1) and the tank is complying with the requirements specified in 40 CFR § 61.343(b)(2).</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Bypass Line Valve = A car-seal or lock and key configuration are used to secure the by-pass line valve in the closed position.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.</p> <p>Closed Vent System and Control Device = A closed vent system and control device is used.</p> <p>Control Device Type/Operations = Flare</p> <p>Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).</p> <p>Closed Vent System and Control Device AMOC = Not using an alternate means of compliance</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p> | |
| OL041T545 | 40 CFR Part 63, Subpart YY | 63YY-0003 | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| OL051T189 | 40 CFR Part 63, Subpart YY | 63YY-0004 | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| OL051T191 | 40 CFR Part 63, Subpart YY | 63YY-0004 | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| OL007H5 | 40 CFR Part 63, Subpart DDDDD | 63DDDDDD-0003 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL032B5A | 40 CFR Part 63, Subpart DDDDD | 63DDDDDD-0001 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL032B5B | 40 CFR Part 63, Subpart DDDDD | 63DDDDDD-0001 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL032H4 | 40 CFR Part 63, Subpart DDDDD | 63DDDDDD-0002 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL033B5A | 40 CFR Part 63, Subpart DDDDD | 63DDDDDD-0001 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|--|---------------------------------|
| OL033B5B | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-0001 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL033H4 | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-0002 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL044B5A | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-0001 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL044B5B | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-0001 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL044H4 | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-0002 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| OL041FL1 | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. | |
| OL041FL1 | 40 CFR Part 60, Subpart A | 60A-0001 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL041FL1 | 40 CFR Part 63, Subpart A | 63A-0001 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL042FL1 | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| OL042FL1 | 40 CFR Part 60, Subpart A | 60A-0002 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL042FL1 | 40 CFR Part 63, | 63A-0002 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|---------------------------------------|--------------|---|---------------------------------|
| | Subpart A | | <p>Part 63.</p> <p>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).</p> <p>Flare Assist Type = Steam assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p> | |
| OL042FL2 | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | <p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p> <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> | |
| OL042FL2 | 40 CFR Part 60, Subpart A | 60A-0002 | <p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Steam-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p> | |
| OL042FL2 | 40 CFR Part 63, Subpart A | 63A-0002 | <p>Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.</p> <p>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).</p> <p>Flare Assist Type = Steam assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p> | |
| OL116FL1H | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | <p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p> | |
| OL116FL1H | 40 CFR Part 60, Subpart A | 60A-0003 | <p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Air-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p> | |
| OL116FL1H | 40 CFR Part 63, Subpart A | 63A-0003 | <p>Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.</p> <p>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|---------------------------------------|--------------|--|---------------------------------|
| | | | Flare Assist Type = Air assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL116FL2H | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. | |
| OL116FL2H | 40 CFR Part 60, Subpart A | 60A-0003 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Air-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL116FL2H | 40 CFR Part 63, Subpart A | 63A-0003 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Air assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL170FL1 | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| OL170FL1 | 40 CFR Part 60, Subpart A | 60A-0002 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL170FL1 | 40 CFR Part 63, Subpart A | 63A-0002 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL170FL2 | 30 TAC Chapter | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|--|---------------------------------|
| | 111, Visible Emissions | | TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| OL170FL2 | 40 CFR Part 60, Subpart A | 60A-0002 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL170FL2 | 40 CFR Part 63, Subpart A | 63A-0002 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL233FL1 | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| OL233FL1 | 40 CFR Part 60, Subpart A | 60A-0002 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL233FL1 | 40 CFR Part 63, Subpart A | 63A-0002 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL233FL2 | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|--|---------------------------------|
| | | | Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| OL233FL2 | 40 CFR Part 60, Subpart A | 60A-0002 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| OL233FL2 | 40 CFR Part 63, Subpart A | 63A-0002 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| SD217FL1 | 30 TAC Chapter 111, Visible Emissions | R1111-0001 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. | |
| SD217FL1 | 40 CFR Part 60, Subpart A | 60A-0001 | Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18. | |
| SD217FL1 | 40 CFR Part 63, Subpart A | 63A-0001 | Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63. | |
| OL007FG1 | 40 CFR Part 63, Subpart YY | 63YY-0002 | Source Type = Ethylene Production. Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate. | |
| OL032FG1 | 40 CFR Part 63, Subpart YY | 63YY-0002 | Source Type = Ethylene Production. Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate. | |
| OL033FG1 | 40 CFR Part 63, Subpart YY | 63YY-0002 | Source Type = Ethylene Production. Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate. | |
| OL041FG2 | 40 CFR Part 63, Subpart YY | 63YY-0002 | Source Type = Ethylene Production. Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate. | |
| OL043FG1 | 40 CFR Part 63, | 63YY-0002 | Source Type = Ethylene Production. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|--|---------------------------------|
| | Subpart YY | | Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate. | |
| OL007H5 | 30 TAC Chapter 111, Visible Emissions | R1111-0003 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL032B5A | 30 TAC Chapter 111, Visible Emissions | R1111-0002 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |
| OL032B5B | 30 TAC Chapter 111, Visible Emissions | R1111-0002 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |
| OL032DCA | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|--|---------------------------------|
| | | | <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL032DCB | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL032H4 | 30 TAC Chapter 111, Visible Emissions | R1111-0003 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL033B5A | 30 TAC Chapter 111, Visible Emissions | R1111-0002 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |
| OL033B5B | 30 TAC Chapter | R1111-0002 | Alternate Opacity Limitation = Not complying with an alternate opacity limit | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|---|---------------------------------|
| | 111, Visible Emissions | | <p>under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |
| OL033DCA | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL033DCB | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL033DCF | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|--|---------------------------------|
| | | | Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute. | |
| OL033H1F | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL033H4 | 30 TAC Chapter 111, Visible Emissions | R1111-0003 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL044B5A | 30 TAC Chapter 111, Visible Emissions | R1111-0002 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |
| OL044B5B | 30 TAC Chapter 111, Visible Emissions | R1111-0002 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|---------------------------------------|--------------|---|---------------------------------|
| | | | <p>opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |
| OL044DCA | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL044DCB | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL044H4 | 30 TAC Chapter 111, Visible Emissions | R1111-0004 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p> | |
| OL006D6B | 40 CFR Part 60, Subpart NNN | 60NNN-0001 | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|-----------------------------|--------------|---|--|
| | | | Construction/Modification Date = On or before December 30, 1983. | |
| OL007D5B | 40 CFR Part 60, Subpart NNN | 60NNN-0001 | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983. | |
| OL032D700 | 40 CFR Part 60, Subpart NNN | 60NNN-0001a | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device. Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr). Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min. | Deleted from the Applicable Requirements Summary Table are the following citations that are not applicable to the site operations in view of the approved AMOC # 29 monitoring requirements. -- Affected Pollutant - VOC/TOC: Added Monitoring/Testing § 60.703(c)(1) Added Monitoring/Testing § 60.703(c)(1)(i) Added Monitoring/Testing § 60.703(c)(1)(ii) Added Monitoring/Testing § 60.703(c)(2) Deleted Monitoring/Testing § 60.663(c) Deleted Monitoring/Testing § 60.663(c)(1) Deleted Monitoring/Testing § 60.663(c)(2) Deleted Monitoring/Testing § 60.664(a) Deleted Monitoring/Testing § 60.664(b) Deleted Monitoring/Testing § 60.664(b)(1) Deleted Monitoring/Testing § 60.664(b)(2) Deleted Monitoring/Testing § 60.664(b)(3) Deleted Monitoring/Testing [G]§ 60.664(b)(4) Deleted Recordkeeping § 60.663(c)(1) Deleted Recordkeeping § 60.663(c)(2) Deleted Recordkeeping § 60.665(b) Deleted Recordkeeping § 60.665(b)(2) Deleted Recordkeeping § 60.665(b)(2)(i) Deleted Recordkeeping § 60.665(b)(2)(ii) Deleted Recordkeeping § 60.665(c) Deleted Recordkeeping § 60.665(c)(3) Deleted Reporting § 60.665(b) Deleted Reporting § 60.665(b)(2) Deleted Reporting § 60.665(b)(2)(i) Deleted Reporting § 60.665(b)(2)(ii) Deleted Reporting § 60.665(c) |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|-----------------------------|--------------|--|---|
| | | | | Deleted Reporting § 60.665(c)(3) Deleted Reporting § 60.665(l)(1) |
| OL032D700 | 40 CFR Part 60, Subpart NNN | 60NNN-0001b | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Flare.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p> | |
| OL033D700 | 40 CFR Part 60, Subpart NNN | 60NNN-0001a | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr).</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p> | <p>Deleted from the Applicable Requirements Summary Table are the following citations that are not applicable to the site operations in view of the approved AMOC # 29 monitoring requirements.</p> <p>-- Affected Pollutant - VOC/TOC:</p> <p>Added Monitoring/Testing § 60.703(c)(1)</p> <p>Added Monitoring/Testing § 60.703(c)(1)(i)</p> <p>Added Monitoring/Testing § 60.703(c)(1)(ii)</p> <p>Added Monitoring/Testing § 60.703(c)(2)</p> <p>Deleted Monitoring/Testing § 60.663(c)</p> <p>Deleted Monitoring/Testing § 60.663(c)(1)</p> <p>Deleted Monitoring/Testing § 60.663(c)(2)</p> <p>Deleted Monitoring/Testing § 60.664(a)</p> <p>Deleted Monitoring/Testing § 60.664(b)</p> <p>Deleted Monitoring/Testing § 60.664(b)(1)</p> <p>Deleted Monitoring/Testing § 60.664(b)(2)</p> <p>Deleted Monitoring/Testing § 60.664(b)(3)</p> <p>Deleted Monitoring/Testing [G]§ 60.664(b)(4)</p> <p>Deleted Recordkeeping § 60.663(c)(1)</p> <p>Deleted Recordkeeping § 60.663(c)(2)</p> |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|-----------------------------|---------------|--|--|
| | | | | Deleted Recordkeeping § 60.665(b) Deleted Recordkeeping § 60.665(b)(2) Deleted Recordkeeping § 60.665(b)(2)(i) Deleted Recordkeeping § 60.665(b)(2)(ii) Deleted Recordkeeping § 60.665(c) Deleted Recordkeeping § 60.665(c)(3) Deleted Reporting § 60.665(b) Deleted Reporting § 60.665(b)(2) Deleted Reporting § 60.665(b)(2)(i) Deleted Reporting § 60.665(b)(2)(ii) Deleted Reporting § 60.665(c) Deleted Reporting § 60.665(c)(3) Deleted Reporting § 60.665(l)(1) |
| OL033D700 | 40 CFR Part 60, Subpart NNN | 60NNN-0001b | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device. Subpart NNN Control Device = Flare. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min. | |
| OL032RXSYS | 40 CFR Part 60, Subpart RRR | 60RRR-0001(1) | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater. Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere. Construction/Modification Date = After June 29, 1990. Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured. Affected Facility Type = Combination of two or more reactor processes and the | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|-----------------------------|---------------|--|---------------------------------|
| | | | <p>common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Boiler or process heater with design heat input of 44 MW (150MMBTU/hr) or greater.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL032RXSYS | 40 CFR Part 60, Subpart RRR | 60RRR-0001(2) | <p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Secondary Fuel = The vent stream is introduced with the primary fuel.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Boiler or process heater with design heat input less than 44 MW (150 MMBTU/hr).</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL032RXSYS | 40 CFR Part 60, | 60RRR-0001(3) | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|-----------------------------|---------------|---|---------------------------------|
| | Subpart RRR | | <p>unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Flare that meets the requirements of 40 CFR § 60.18.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL033RXSYS | 40 CFR Part 60, Subpart RRR | 60RRR-0002(1) | <p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Boiler or process heater with design heat input of 44 MW (150MMBTU/hr) or greater.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|-----------------------------|---------------|--|---------------------------------|
| | | | <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL033RXSYS | 40 CFR Part 60, Subpart RRR | 60RRR-0002(2) | <p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Secondary Fuel = The vent stream is introduced with the primary fuel.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Boiler or process heater with design heat input less than 44 MW (150 MMBTU/hr).</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL033RXSYS | 40 CFR Part 60, Subpart RRR | 60RRR-0002(3) | <p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|-----------------------------|---------------|--|---------------------------------|
| | | | <p>value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Flare that meets the requirements of 40 CFR § 60.18.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL044RXSYS | 40 CFR Part 60, Subpart RRR | 60RRR-0003(1) | <p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Boiler or process heater with design heat input of 44 MW (150MMBTU/hr) or greater.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL044RXSYS | 40 CFR Part 60, | 60RRR-0003(2) | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|-----------------------------|---------------|---|---------------------------------|
| | Subpart RRR | | <p>unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Secondary Fuel = The vent stream is introduced with the primary fuel.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Boiler or process heater with design heat input less than 44 MW (150 MMBTU/hr).</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL044RXSYS | 40 CFR Part 60, Subpart RRR | 60RRR-0003(3) | <p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater.</p> <p>Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured.</p> <p>Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged.</p> <p>Bypass Line Valve Secured = The bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration.</p> <p>TOC Exemption = No TOC concentration exemption.</p> <p>Control Device = Flare that meets the requirements of 40 CFR § 60.18.</p> <p>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|----------------------------|--------------|---|---------------------------------|
| | | | <p>subject to the provisions of Title 40 CFR Part 60, Subpart DDD.</p> <p>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve.</p> <p>TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2).</p> <p>TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.</p> | |
| OL032OW | 40 CFR Part 63, Subpart YY | 63YY-0005 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| OL032WW1 | 40 CFR Part 63, Subpart YY | 63YY-0004 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| OL033OW | 40 CFR Part 63, Subpart YY | 63YY-0005 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| OL033WW1 | 40 CFR Part 63, Subpart YY | 63YY-0004 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| OL041D550 | 40 CFR Part 61, Subpart FF | 61FF-0002 | <p>AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used.</p> <p>By-Pass Line = The closed-vent system contains a by-pass line that could divert the vent stream away from the control device.</p> <p>Continuous Monitoring = Samples of the waste stream exiting the treatment process are collected monthly and analyzed for benzene concentration.</p> <p>By-Pass Line Valve = A car-seal or lock and key configuration is used to secure the by-pass line valve in the closed position.</p> <p>Complying with § 61.342(e) = The facility is complying with 40 CFR § 61.342(e).</p> <p>Control Device Type/Operation = Flare.</p> <p>Openings = The treatment process or wastewater treatment system unit has openings.</p> <p>Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system.</p> <p>Benzene Removal = Benzene is removed from the waste stream to a level of less than 10 ppmw on a flow weighted annual average basis.</p> <p>Less Than Atmospheric = A cover and closed-vent system are operated such that the treatment process or wastewater system unit is maintained at ambient atmospheric pressure.</p> <p>Closed-Vent System and Control Device = A closed-vent system and control device is used.</p> <p>Process Or Stream Exemption = The treatment process or waste stream is not complying with 40 CFR §61.348(d).</p> <p>AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used.</p> <p>Treatment Process Engineering Calculations = Performance tests are used to show that the treatment process or wastewater treatment system unit achieves</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|----------------------------|--------------|--|---------------------------------|
| | | | its emission limitation. | |
| OL041D550 | 40 CFR Part 63, Subpart YY | 63YY-0006 | Facility Type = ETHYLENE PRODUCTION FACILITY | |
| OL041D551 | 40 CFR Part 61, Subpart FF | 61FF-0003 | <p>AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used.</p> <p>By-Pass Line = The closed-vent system contains a by-pass line that could divert the vent stream away from the control device.</p> <p>Continuous Monitoring = The wastewater treatment system unit process parameters are continuously monitored to indicate proper system operation.</p> <p>By-Pass Line Valve = A car-seal or lock and key configuration is used to secure the by-pass line valve in the closed position.</p> <p>Complying with § 61.342(e) = The facility is complying with 40 CFR § 61.342(e).</p> <p>Control Device Type/Operation = Flare.</p> <p>Openings = The treatment process or wastewater treatment system unit has no openings.</p> <p>Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system.</p> <p>Benzene Removal = Benzene is removed from the waste stream to a level of less than 10 ppmw on a flow weighted annual average basis.</p> <p>Closed-Vent System and Control Device = A closed-vent system and control device is used.</p> <p>Process Or Stream Exemption = The treatment process or waste stream is not complying with 40 CFR §61.348(d).</p> <p>AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used.</p> <p>Treatment Process Engineering Calculations = Engineering calculations show that the treatment process or wastewater treatment system unit is proven to achieve its emission limitation.</p> | |
| OL041D551 | 40 CFR Part 63, Subpart YY | 63YY-0006 | Facility Type = ETHYLENE PRODUCTION FACILITY | |
| OL041OW | 40 CFR Part 63, Subpart YY | 63YY-0005 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| OL041WW1 | 40 CFR Part 63, Subpart YY | 63YY-0004 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| OL043OW | 40 CFR Part 63, Subpart YY | 63YY-0005 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| OL043WW1 | 40 CFR Part 63, Subpart YY | 63YY-0004 | Facility Type = ACETAL RESINS PRODUCTION FACILITY | |
| PROFEEDS | 40 CFR Part 63, Subpart YY | 63YY-0001 | <p>Research and Development = THE PROCESS UNIT IS USED IN PRODUCTION</p> <p>Primary Product = THE PRIMARY PRODUCT OF THE PROCESS UNIT IS A PRODUCT PRODUCED BY A REGULATED SOURCE CATEGORY</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|-------------------------------|--------------|---|---------------------------------|
| | | | Source Category = ETHYLENE PRODUCTION | |
| PROHCC3 | 40 CFR Part 63, Subpart YY | 63YY-0001 | Research and Development = THE PROCESS UNIT IS USED IN PRODUCTION Primary Product = THE PRIMARY PRODUCT OF THE PROCESS UNIT IS A PRODUCT PRODUCED BY A REGULATED SOURCE CATEGORY Source Category = ETHYLENE PRODUCTION | |
| PROHCC3A | 40 CFR Part 63, Subpart YY | 63YY-0001 | Research and Development = THE PROCESS UNIT IS USED IN PRODUCTION Primary Product = THE PRIMARY PRODUCT OF THE PROCESS UNIT IS A PRODUCT PRODUCED BY A REGULATED SOURCE CATEGORY Source Category = ETHYLENE PRODUCTION | |
| PROHCC3B | 40 CFR Part 63, Subpart YY | 63YY-0001 | Research and Development = THE PROCESS UNIT IS USED IN PRODUCTION Primary Product = THE PRIMARY PRODUCT OF THE PROCESS UNIT IS A PRODUCT PRODUCED BY A REGULATED SOURCE CATEGORY Source Category = ETHYLENE PRODUCTION | |
| PROWATER | 40 CFR Part 63, Subpart YY | 63YY-0001 | Research and Development = THE PROCESS UNIT IS USED IN PRODUCTION Primary Product = THE PRIMARY PRODUCT OF THE PROCESS UNIT IS A PRODUCT PRODUCED BY A REGULATED SOURCE CATEGORY Source Category = ETHYLENE PRODUCTION | |

* - The “unit attributes” or operating conditions that determine what requirements apply

** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

| NSR Permit | Federal Operating Permit(FOP) |
|---|--|
| Issued Prior to new Construction or modification of an existing facility | For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation. |
| Authorizes air emissions | Codifies existing applicable requirements, does not authorize new emissions |
| Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented. | Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP. |
| Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations. | One public notice required. Opportunity for public comments. No contested case hearings. |
| Applies to all point source emissions in the state. | Applies to all major sources and some non-major sources identified by the EPA. |
| Applies to facilities: a portion of site or individual emission sources | One or multiple FOPs cover the entire site (consists of multiple facilities) |
| Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis. | Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site. |
| Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources. | Opportunity for EPA review, Affected states review, and a Public petition period for every FOP. |
| Permits have a table listing maximum emission limits for pollutants | Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements. |
| Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin. | Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated. |
| NSR permits are issued independent of FOP requirements. | FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference |

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

| Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area. | |
|---|------------------------------|
| Authorization No.: 124730 | Issuance Date: 12/15/2014 |
| Authorization No.: 137771 | Issuance Date: 01/13/2016 |
| Authorization No.: 140734 | Issuance Date: 06/10/2016 |
| Authorization No.: 20489 | Issuance Date: 07/22/2016 |
| Authorization No.: 48588 | Issuance Date: 04/10/2013 |
| Authorization No.: 48590 | Issuance Date: 04/10/2013 |
| Authorization No.: 48761 | Issuance Date: 03/20/2013 |
| Authorization No.: 49793 | Issuance Date: 01/04/2012 |
| Authorization No.: 7752 | Issuance Date: 09/18/1979 |
| Authorization No.: 84724 | Issuance Date: 08/19/2013 |
| Authorization No.: 908 | Issuance Date: 09/21/2016 |
| Permits By Rule (30 TAC Chapter 106) for the Application Area | |
| Number: 106.122 | Version No./Date: 09/04/2000 |
| Number: 106.261 | Version No./Date: 09/04/2000 |
| Number: 106.261 | Version No./Date: 11/01/2003 |
| Number: 106.262 | Version No./Date: 09/04/2000 |
| Number: 106.262 | Version No./Date: 11/01/2003 |
| Number: 106.263 | Version No./Date: 11/01/2001 |
| Number: 106.355 | Version No./Date: 09/04/2000 |
| Number: 106.472 | Version No./Date: 09/04/2000 |
| Number: 106.475 | Version No./Date: 09/04/2000 |
| Number: 106.476 | Version No./Date: 09/04/2000 |

| | |
|-------------|------------------------------|
| Number: 106 | Version No./Date: 09/12/1989 |
| Number: 106 | Version No./Date: 05/04/1994 |
| Number: 106 | Version No./Date: 04/05/1995 |
| Number: 106 | Version No./Date: 06/07/1996 |

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

| Unit/Group/Process Information | |
|---|--|
| ID No.: OL032D700 | |
| Control Device ID No.: OL032B5B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1D | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1E | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H2 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H4 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H5A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-0001a |
| Pollutant: VOC/TOC | Main Standard: § 60.662(a) |
| Monitoring Information | |
| Indicator: Inspection to verify that bypass valves are car-sealed and closed and the vent stream is not diverted to the atmosphere. | |
| Minimum Frequency: Once per month | |
| Averaging Period: N/A | |

Deviation Limit: Failure to conduct monthly inspection of closed car-sealed bypass valves shall be considered and reported as a deviation.

Basis of CAM: Conducting an inspection to verify that bypass valves are car-sealed and closed and the vent stream is not diverted to the atmosphere is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer or at least once per month, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.

| Unit/Group/Process Information | |
|--|--|
| ID No.: OL032D700 | |
| Control Device ID No.: OL032H1A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1D | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H1E | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H2 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H4 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H5A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL032H5B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-0001a |
| Pollutant: VOC/TOC | Main Standard: § 60.662(a) |
| Monitoring Information | |
| Indicator: Period of operation | |
| Minimum Frequency: N/A | |
| Averaging Period: N/A | |
| Deviation Limit: All periods of operation of the steam generation boilers or heaters that is not recorded shall be considered and reported as a deviation. | |

Basis of CAM: Steam Generating Unit (Boiler)/Process Heater - Period of Operation

A common way to control VOC emissions is to route emissions mixed with fuels to a boiler or process heater. Boilers and process heaters when used as a control device have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. The boilers and process heaters shall be maintained and operated in accordance with manufacturer's specifications or other written procedures. All periods of operation of the steam generation boilers or heaters that is not recorded shall be considered and reported as a deviation as required by 30 TAC § 122.145(2).

| Unit/Group/Process Information | |
|--|----------------------------|
| ID No.: OL032D700 | |
| Control Device ID No.: OL170FL1 | Control Device Type: Flare |
| Control Device ID No.: OL170FL2 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-0001b |
| Pollutant: VOC/TOC | Main Standard: § 60.662(b) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: N/A | |
| Deviation Limit: An absence of a pilot flame shall be considered and reported as a deviation. | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

| Unit/Group/Process Information | |
|--|--|
| ID No.: OL033D700 | |
| Control Device ID No.: OL033B5A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033B5B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1D | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1E | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1F | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H2 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H4 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-0001a |
| Pollutant: VOC/TOC | Main Standard: § 60.662(a) |
| Monitoring Information | |
| Indicator: Inspection to Verify that Bypass Valves are Car-Sealed and Closed and the Vent Stream is not Diverted to the Atmosphere. | |
| Minimum Frequency: Once per month. | |
| Averaging Period: N/A | |
| Deviation Limit: Failure to conduct monthly inspection of closed car-sealed bypass valves shall be considered and reported as a deviation. | |

Basis of CAM: Conducting an inspection to verify that bypass valves are car-sealed and closed and the vent stream is not diverted to the atmosphere is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.

| Unit/Group/Process Information | |
|--|--|
| ID No.: OL033D700 | |
| Control Device ID No.: OL033B5A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033B5B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1D | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1E | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H1F | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H2 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Control Device ID No.: OL033H4 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW) |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-0001a |
| Pollutant: VOC/TOC | Main Standard: § 60.662(a) |
| Monitoring Information | |
| Indicator: N/A | |
| Minimum Frequency: N/A | |
| Averaging Period: N/A | |
| Deviation Limit: All periods of operation of the steam generation boilers or heaters that is not recorded shall be considered and reported as a deviation. | |

Basis of CAM: Steam Generating Unit (Boiler)/Process Heater - Period of Operation. A common way to control VOC emissions is to route emissions mixed with fuels to a boiler or process heater. Boilers and process heaters when used as a control device have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. The boilers and process heaters shall be maintained and operated in accordance with manufacturer's specifications or other written procedures. All periods of operation of the steam generation boilers or heaters that is not recorded shall be considered and reported as a deviation as required by 30 TAC § 122.145(2).

| Unit/Group/Process Information | |
|--|----------------------------|
| ID No.: OL033D700 | |
| Control Device ID No.: OL170FL1 | Control Device Type: Flare |
| Control Device ID No.: OL170FL2 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-0001b |
| Pollutant: VOC/TOC | Main Standard: § 60.662(b) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: N/A | |
| Deviation Limit: An absence of a pilot flame shall be considered and reported as a deviation. | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

| Unit/Group/Process Information | |
|---|-----------------------------------|
| ID No.: OL007H5 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0003 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(A) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: 1. Failure to perform quarterly visible emissions observations (unless unit not in operation) 2. Visible emissions present during quarterly observation, but no Method 9 Test performed within 24 hours 3. Method 9 Test performed and opacity > 30% | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: OL032B5A | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0002 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: The presence of visible emissions unless a Method 9 opacity test is performed within 24 hours of observing visible emissions and the source is determined to be in compliance with the 15% opacity standard. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: OL032B5B | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0002 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: The presence of visible emissions unless a Method 9 opacity test is performed within 24 hours of observing visible emissions and the source is determined to be in compliance with the 15% opacity standard. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: OL032DCA | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: OL032DCB | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
|---|-----------------------------------|
| ID No.: OL032H4 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0003 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(A) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: 1. Failure to perform quarterly visible emissions observations (unless unit not in operation) 2. Visible emissions present during quarterly observation, but no Method 9 Test performed within 24 hours 3. Method 9 Test performed and opacity > 30% | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: OL033B5A | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0002 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: The presence of visible emissions unless a Method 9 opacity test is performed within 24 hours of observing visible emissions and the source is determined to be in compliance with the 15% opacity standard. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: OL033B5B | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0002 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: The presence of visible emissions unless a Method 9 opacity test is performed within 24 hours of observing visible emissions and the source is determined to be in compliance with the 15% opacity standard. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

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| Unit/Group/Process Information | |
| ID No.: OL033DCA | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

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| Unit/Group/Process Information | |
| ID No.: OL033DCB | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

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| Unit/Group/Process Information | |
| ID No.: OL033DCF | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

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| Unit/Group/Process Information | |
| ID No.: OL033H1F | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

| Unit/Group/Process Information | |
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| ID No.: OL033H4 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0003 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(A) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: 1. Failure to perform quarterly visible emissions observations (unless unit not in operation) 2. Visible emissions present during quarterly observation, but no Method 9 Test performed within 24 hours 3. Method 9 Test performed and opacity > 30% | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

| Unit/Group/Process Information | |
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| ID No.: OL044B5A | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0002 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: The presence of visible emissions unless a Method 9 opacity test is performed within 24 hours of observing visible emissions and the source is determined to be in compliance with the 15% opacity standard. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
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| ID No.: OL044B5B | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0002 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: The presence of visible emissions unless a Method 9 opacity test is performed within 24 hours of observing visible emissions and the source is determined to be in compliance with the 15% opacity standard. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
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| ID No.: OL044DCA | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| <p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

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| Unit/Group/Process Information | |
| ID No.: OL044DCB | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

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| Unit/Group/Process Information | |
| ID No.: OL044H4 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-0004 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to perform quarterly visible emission (VE) observations when unit is operating or VE are present during quarterly observations but no TM 9 is performed within 24 hrs or TM 9 is performed and opacity is greater than 20%. | |
| Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes

OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes